LISTING OF CLAIMS

1.   (Currently Amended) An apparatus for calculating an initial correction coefficient, the apparatus being used for (1) detecting decrease in tire air-pressure or (2) calculating a slip rate and being arranged to calculate initial correction coefficients for correcting rotational angular velocities obtained from outputs of rotational angular velocity detecting means which are respectively provided in connection with four tires mounted to a vehicle and comprising:

   a judged value calculating means which calculates a judged value, on the basis of the rotational angular velocities, for determining whether an air-pressure of a tire has decreased;

   an identifying means which identifies, on the basis of the judged value, whether the vehicle is performing turning movements at high velocity, straight-ahead running or turning movements at mid/low velocity; and

   an initial correction coefficient calculating means which obtains an initial correction coefficient for eliminating a difference between effective rolling radii owing to initial differences between respective tires from the rotational angular velocities, when it has been identified by the identifying means that the vehicle is performing straight-ahead running or turning movements at mid/low velocity, wherein

   the identifying means includes a limit processing means which judges whether a difference or a ratio between the calculated judged value and a previously obtained reference judged value is less than a preliminarily obtained threshold or not, and a running determining means which determines, when it is determined that the value of the difference or the ratio is less than the threshold, that the vehicle is performing straight-ahead running or turning movements at mid/low velocity, wherein the apparatus further includes:

   a reference judging means in which a judged value obtained by performing averaging processes on the basis of the calculated judged value and the previously obtained judged value is used as the reference judged value employed in the identifying means;

   a judged value replacing means which regards the reference value obtained by performing averaging processes on the basis of the judged value and a previously obtained judged

ADM/FRH/

value as an initial reference judged value, prior to performing identifying processes in the
identifying means;

a first storing means which stores the number of times of calculation of the initial reference
judged values; a number judging means which judges whether the number of times of
calculation is less than a preliminary set threshold;

an execution prohibiting means which performs only processes for obtaining the initial
reference judged value but prohibits execution of identifying processes by the identifying
means when it is determined that the number of times of calculation is less than the
threshold; and

a setting means which sets the initial reference judged value as a reference judged value
which is first used in the identifying means; and wherein

the identifying means includes (1) a second storing means which stores a number of times of
identification in which it is identified that the vehicle is performing turning movements at
high velocity, (2) an identification number judging means which judges whether the
number of times of identification is not less than a preliminary determined threshold or
not, and (3) an initialization executing means which initializes the initial correction
coefficient when it is determined that the number of times of identification is not less
than the threshold.

2-4.   (Cancelled)

5.   (Currently Amended) A method for calculating an initial correction coefficient, the
method being applicable to an apparatus for (1) detecting decrease in tire air-pressure or (2)
calculating a slip rate, in which initial correction coefficients for correcting rotational angular
velocities obtained from outputs of rotational angular velocity detecting means which are
respectively provided in connection with four tires mounted to a vehicle are calculated, the
method comprising the steps of:

calculating a judged value, on the basis of the rotational angular velocities, for determining
whether an air-pressure of a tire has decreased;

identifying, on the basis of the judged value, whether the vehicle is performing turning movements at high velocity, straight-ahead running or turning movements at mid/low velocity; ~~and~~

obtaining an initial correction coefficient for eliminating a difference between effective rolling radii owing to initial differences between respective tires from the rotational angular velocities, when it has been identified by the identifying means that the vehicle is performing straight-ahead running or turning movements at mid/low velocity, wherein the identifying step includes the steps of judging whether a difference or a ratio between the calculated judged value and a previously obtained reference judged value is less than a preliminarily obtained threshold or not, and of determining, when it is determined that the value of the difference or the ratio is less than the threshold, that the vehicle is performing straight-ahead running or turning movements at mid/low ~~velocity~~ velocity;

<u>employing a reference judging means in which a judged value obtained by performing averaging processes on the basis of the calculated judged value and the previously obtained judged value is used as the reference judged value employed in the identifying means;</u>

<u>employing a judged value replacing means which regards the reference value obtained by performing averaging processes on the basis of the judged value and a previously obtained judged value as an initial reference judged value, prior to performing identifying processes in the identifying means;</u>

<u>employing a first storing means which stores the number of times of calculation of the initial reference judged values; a number judging means which judges whether the number of times of calculation is less than a preliminary set threshold;</u>

<u>employing an execution prohibiting means which performs only processes for obtaining the initial reference judged value but prohibits execution of identifying processes by the identifying means when it is determined that the number of times of calculation is less than the threshold; and</u>

ADM/FRH/

employing a setting means which sets the initial reference judged value as a reference
judged value which is first used in the identifying means; and wherein

the identifying means employs (1) a second storing means which stores a number of times of
identification in which it is identified that the vehicle is performing turning movements at
high velocity, (2) an identification number judging means which judges whether the
number of times of identification is not less than a preliminary determined threshold or
not, and (3) an initialization executing means which initializes the initial correction
coefficient when it is determined that the number of times of identification is not less
than the threshold.

6.   (Currently Amended) A computer-readable medium carrying a program for calculating
an initial correction coefficient, the program being applicable to an apparatus for (1) detecting
decrease in tire air-pressure or (2) calculating a slip rate, wherein for calculating initial correction
coefficients for correcting rotational angular velocities obtained from outputs of rotational
angular velocity detecting means which are respectively provided in connection with four tires
mounted to a vehicle, the program, when executed, causing a computer is made to function as

   a judged value calculating means which calculates a judged value, on the basis of the
      rotational angular velocities, for determining whether an air-pressure of a tire has
      decreased,

   an identifying means which identifies, on the basis of the judged value, whether the vehicle
      is performing turning movements at high velocity, straight-ahead running or turning
      movements at mid/low velocity, and

   an initial correction coefficient calculating means which obtains an initial correction
      coefficient for eliminating a difference between effective rolling radii owing to initial
      differences between respective tires from the rotational angular velocities, when it has
      been identified by the identifying means that the vehicle is performing straight-ahead
      running or turning movements at mid/low velocity, and further as a limit processing
      means which judges whether a difference or a ratio between the calculated judged value
      and a previously obtained reference judged value is less than a preliminarily obtained

threshold or not, and a running determining means which determines, when it is determined that the value of the difference or the ratio is less than the threshold, that the vehicle is performing straight-ahead running or turning movements at mid/low velocity, wherein the apparatus further includes:

a reference judging means in which a judged value obtained by performing averaging processes on the basis of the calculated judged value and the previously obtained judged value is used as the reference judged value employed in the identifying means;

a judged value replacing means which regards the reference value obtained by performing averaging processes on the basis of the judged value and a previously obtained judged value as an initial reference judged value, prior to performing identifying processes in the identifying means;

a first storing means which stores the number of times of calculation of the initial reference judged values; a number judging means which judges whether the number of times of calculation is less than a preliminary set threshold;

an execution prohibiting means which performs only processes for obtaining the initial reference judged value but prohibits execution of identifying processes by the identifying means when it is determined that the number of times of calculation is less than the threshold; and

a setting means which sets the initial reference judged value as a reference judged value which is first used in the identifying means; and wherein

the identifying means includes (1) a second storing means which stores a number of times of identification in which it is identified that the vehicle is performing turning movements at high velocity, (2) an identification number judging means which judges whether the number of times of identification is not less than a preliminary determined threshold or not, and (3) an initialization executing means which initializes the initial correction coefficient when it is determined that the number of times of identification is not less than the threshold.